	Application No.	Applicant(s)	
Notice of Allowability	09/048,026	UCHINO ET AL.	
	Examiner	Art Unit	
	CESAR B PAULA	2178	<u> </u>
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.			
1. This communication is responsive to <u>remarks filed on 9/7/04</u> .			
2. The allowed claim(s) is/are 1-2, 8-10, 16-17, and 32, renumbered as 1-8.			
3. The drawings filed on <u>26 March 1998</u> are accepted by the Examiner.			
<ul> <li>4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a)  All b)  Some c)  None of the:</li> </ul>			
1. 🖾 Certified copies of the priority documents have been received.			
2. Certified copies of the priority documents have been received in Application No			
<ol> <li>Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ol>			
* Certified copies not received:			
5. Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).			
(a) The translation of the foreign language provisional application has been received.			
6. Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.			
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.			
7. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.			
<ul> <li>8.   CORRECTED DRAWINGS must be submitted.</li> <li>(a)   including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached</li> <li>1)  hereto or 2)   to Paper No</li> </ul>			
(b) including changes required by the proposed drawing correction filed, which has been approved by the Examiner.			
(c) 🔲 including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No			
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.			
9. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.			
Attachment(s)			
<ul> <li>1⊠ Notice of References Cited (PTO-892)</li> <li>3☐ Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>5☐ Information Disclosure Statements (PTO-1449), Paper No</li> <li>7☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ul>	2☐ Notice of Informa 4☐ Interview Summa 6☐ Examiner's Amer 8⊠ Examiner's State 9☐ Other	ary (PTO-413), Paper adment/Comment	No
			-

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**EXAMINER'S AMENDMENT/REASONS FOR ALLOWANCE** 

1. An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

The title has been amended as follows:

Please replace the entire title with the following: "STATISTICAL METHOD FOR

EXTRACTING, AND DISPLAYING KEYWORDS IN FORUM/MESSAGE BOARD

DOCUMENTS".

Reasons for Allowance

2. Regarding claim 1, the examiner concurs with the applicants' statement regarding the

references that "[W]hile the KWIC method is useful for documents written in formal styles such

as news reports and commentaries, and documents released on web sites, for example, related to

government authorities, it is not useful for 'a forum or a message board'. In particular,

documents released at bulletin board service sites (BBS) contain many words and/or ASCII-

pictograms, which represent only noise for a process of predetermining appropriateness of their

contents. Therefore, extracting and displaying such portions lying before and after a keyword, in

most cases, proves to be useless for predetermining the appropriateness of the contents.

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In contrast, in accordance with the present invention, there is provided a function for automatically extracting keywords, such as nouns, that are uniquely associated with the statement (corresponding to 'a document' recited, for example, in claim 1) or with an entire thread (corresponding to 'a group of cross-referenced documents' recited in claim 1) from the statement or the thread beforehand as if something that may be called a content summary of a document is generated. As a result, a user can grasp reliably the contents of the statement or the thread even if it is written in a poorly structured manner when it is released at a bulletin board service site. This benefit cannot be achieved by the KWIC method for displaying search results. The present invention, in particular, is concerned with helping a user to understand the essence of an entire set of contents which, being those typically found in bulletin board service sites comprise statements which are in a spoken and casual style language and widely vary from each other in terms of the statement length..... it is submitted that none of the prior art teaches or suggests:

a document group keyword extraction device to extract keywords contained in a body of a document forming part of each group of documents based on a statistical analysis by referring to the document group information" (page 10, lines 3-22).

Moreover, the examiner also concurs with the following statement: "[r]eferring to a case in which a search engine, such as Google, has found its search result, a one-line simple statement is output such as "thank you for your advice on \_\_\_\_\_". A display using the KWIC method in correspondence with this statement would not provide a meaningful amount of information. This is because the search engine is designed to retrieve data in units of one statement (or one page). In contrast, according to the present invention, keywords relevant to an entire thread that house this statement are found from the entire thread for extraction and display as those indicating the

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contents of the entire thread. As a result, the user can determine the appropriateness of this thread from the display more accurately. It is also submitted that in contrast to the KWIC method, the present invention does not assume a user inputting search words. Instead, the apparatus according to the present invention is configured to extract and display automatically the keywords together with the title of the concerned document based on a statistical analysis. Thus, the present claimed invention will display extracted keywords and document titles retaining original correlations between them. Neither Medves nor any other cited prior art teaches or suggests a technical concept for displaying the title of a document and keywords extracted from the document in the form in which their original correspondence is retained" (page 11, lines 13-29).

Moreover, claims 8-9, 16-17, and 32 contain the limitations of extracting, and displaying keywords found in claim 1, as explained above. Therefore, these claims are not taught or suggested by Nolan, Knowles and Medves based on the same rationale indicated above.

Furthermore, the subject matter discussed in the claims above are not shown nor would have been obvious to a person of ordinary skill in the art at the time of the invention was made in the prior art cited.

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## Conclusion

- I. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cameron et al, "Learning GNU Emacs", 2<sup>nd</sup> Ed, O'Reilly, 9/96, sect. 6.4-6.4.8.
- II. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cesar B. Paula whose telephone number is (703) 306-5543 (571) 272-2148 as of 10/12/04). The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 4:00 p.m. (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong, can be reached on (703) 308-5465 ((571) 272-4124 as of 10/12/04). However, in such a case, please allow at least one business day.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Any response to this Action should be mailed to:

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Or faxed to:

• (703) 703-872-9306, (for all Formal communications intended for entry)

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

CESAR B PAULA Patent Examiner Art Unit 2178

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10/12/04